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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,015	10/16/2006	Kazuyuki Kawabe	442P103	5815
42754	7590	10/06/2008		
Nields & Lemack 176 E. Main Street Suite #5 Westboro, MA 01581			EXAMINER JACKSON, MONIQUE R	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 10/06/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,015

Applicant(s)

KAWABE, KAZUYUKI

Examiner

Monique R. Jackson

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/08)
Paper No(s)/Mail Date 10/30/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

1. Claims 5-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-9 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 413 136 (EP'136.) EP'136 teaches an aqueous polymer adhesive composition comprising a polyvinyl alcohol (A), an amino compound or its salt (B), a crosslinking agent (C) preferably having at least 2 functional groups such as epoxy compounds, and as component (D) at least one water-insoluble and alkali-soluble substance and/or water-insoluble and alkali-swellable substance (Abstract; Page 2, lines 52-Page 3, lines 6; Page 5, line 58-Page 6, line 14.) EP'136 teaches that examples of the component (D) are copolymers of olefin monomers and carboxylic group-containing monomers such as (meth)acrylic acid ester, maleic anhydride or itaconic acid with an α -olefin (Page 3, line 58-Page 4, line 5.) PVA may be epoxy-modified PVA (Page 2, lines 33-35.) EP'136 teaches that suitable α -olefins include isobutylene (Page 4, lines 6-10.) EP'136 specifically teaches that the most preferred copolymers are copolymers of isobutylene with maleic anhydride or styrene with maleic anhydride; with the most preferred super-absorbent

resin obtained by de-alkali treating a crosslinked hydrolyzed isobutylene-maleic anhydride copolymer (Page 4, lines 28-37; Page 5, lines 1-4.) EP'136 further teach a specific example comprising water, PVA, isobutylene-maleic anhydride copolymer having a molecular weight of 160,000 to 170,000, and glyoxal as the crosslinking agent (Example 3.)

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Iguchi et al (USPN 4,119,463.) Iguchi et al teach an aqueous binder composition comprising styrene-maleic anhydride copolymer (*reads on "crosslinking agent"*), isobutylene-maleic anhydride copolymer, and polyvinyl alcohol (PVOH); wherein hydroxyl groups of the PVOH react with a part of the carboxyl group on the maleic anhydride copolymer molecule to cause gelling and an increase in viscosity (Abstract; Col. 2, lines 15-68.) Iguchi et al teach that the styrene-maleic anhydride and isobutylene-maleic anhydride preferably have 300-1000 repeating base units or 5×10^4 to 15×10^4 average molecular weight (Col. 3, lines 22-45.) Iguchi et al teach that the binder composition can be utilized to form photographic layers including coat layers, protective layers, as well as inter layers (Col. 1.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yotsuyanagi et al (USPN 4,073,756) teach a water-based adhesive composition that is in wax-like or jelly-like state at room temperature and comprises (a) an N-fatty acid acylated amino acid or alkali metal

salt, ammonium salt or amine salt of the acid, used as a gelling agent (*reads on "crosslinking agent"*); (b) a compound having a polyoxyalkylene structure containing at least four oxyalkylene units; (c) water soluble or water dispersible polymer having adhesive properties; and (d) water or a mixture of water and solvents and/or one or more plasticizer(s) (Abstract; Col. 2, lines 13-Col. 3, line 37.) Yotsuyanagi et al teach that the water soluble or dispersible polymer has a mean molecular weight of about 5,000 to about 2,000,000, preferably 10,000 to 1,500,000; and include copolymers of isobutylene and maleic anhydride having a mean molecular weight of 10,000 to 300,000; as well as polyvinyl alcohol and other synthetic and natural polymers (Col. 5, lines 20-66.) Though Yotsuyanagi et al do not specifically teach a mixture of the PVOH and isobutylene/maleic anhydride as component (c) of the adhesive, Yotsuyanagi et al provides a suggestion to utilize any of the suitable water-soluble or water-dispersible polymers, wherein a mixture or combination of any of the suitable polymers including the PVOH and isobutylene/maleic anhydride would have been obvious to one having ordinary skill in the art at the time of the invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 10:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Monique R Jackson/
Primary Examiner, Art Unit 1794
September 30, 2008